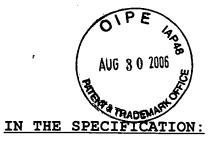
1727 KING STREET ALEXANDRIA, VIRGINIA 22314-2700



[0034] In view of the results of the tests described above, an appropriate surface treating method of the engine valve 10 (titanium part) comprises the following steps. In a first step, from a correlation of the hardness against the film thickness t of the hard oxide film 18 formed on a surface of the valve 10, an effective thickness of the hard oxide film 18 corresponding to a required film hardness is determined. The effective roughness Rz thickness is, for example, 14 micrometers or less (FIG. 5).